Application No.:

10/594,774

Amendment Dated:

December 14, 2011 Reply to Office Action of: September 14, 2011

<u>Amendments to the Claims</u>:

(Currently Amended) An accumulation display device comprising: 1.

a reception unit that receives a currently broadcasted program content, index information associating a currently broadcasted program content with an index and specifying a scene of the program and trigger information including mode information for special reproduction of the program content and constituting metadata with the index information;

an accumulation unit that accumulates the program content, the index information and the trigger information;

a main display unit receiving and displaying the input of the program content received by the reception unit;

a metadata interpretation unit that interprets the index information and the trigger information of the currently broadcasted or the accumulated program content and outputs mode information for special reproduction;

an accumulated image processing unit connected with a mobile data terminal functioning as a sub reception and display unit, and extracting at least a part of the accumulated program content based on the mode information from the trigger information, restructures the program content extracted based on the mode information, and outputs the restructured program content to the mobile data terminal; and

a mobile data terminal management unit managing information of the mobile data terminal to which the restructured program content should be outputted;

the index information includes a program ID for identifying a program corresponding to the index information, an ID for identifying the index information, starttime data of the corresponding program, and finishtime data of the corresponding program;

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the mobile data terminal management unit manages information of the mobile data terminal and further, generates a metadata for a video operation menu including various operation commands for performing reproduction, replay reproduction, stop and so on corresponding to the mobile data terminal and transmits it to the mobile data terminal, metadata for the video operation menu corresponding to the mobile data terminal, and then realizes a video operation menu on the mobile data terminal; andterminal;

the accumulated image processing unit outputs, when the mobile data terminal management unit receives an operation command according to the metadata for the video operation menu from the mobile data terminal, the restructured program content to the mobile data terminal or stops the outputting operation according to the operation command; and

the accumulated image processing unit, in the restructuring and outputting operation, further extracts at least a part of the program content from the index information based on contents of the trigger information, restructures the program content extracted based on the mode information, outputs the restructured program content to the mobile data terminal, and displays the restructured program content video operated on the mobile data terminal in a manner that the currently broadcasted original program content received by the reception unit is displayed in parallel on the main display unit.

- (Original) The accumulation display device according to claim 1, 2. wherein the trigger information includes mode information for performing special reproduction of at least any one of interlocked reproduction, replay reproduction, highlight reproduction, and follow reproduction of a currently viewed program content.
- (Original) The accumulation display device according to claim 2, further 3. comprising a display unit that displays the currently broadcasted or the accumulated program content and the mode information for special reproduction.
- 4. (Original) The accumulation display device according to claim 1, wherein the accumulated image processing unit extracts, according to a request of mode information for special reproduction from a sub-display device receiving a

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restructured program content, at least a part of the accumulated program content based on trigger information received after the request or the latest trigger information of the request, and outputs the restructured program content.

5. (Previously Presented) The accumulation display device according to claim 1, further comprising a sub-display device management unit that manages terminal information including a terminal ID and performance of at least one mobile data terminal receiving a restructured program content,

wherein the accumulated image processing unit processes and outputs a program content according to performance of each sub-display device.

6.-8. (Cancelled).

- 9. (Previously Presented) The accumulation display device according to claim 1, wherein the index information further includes meaning information describing contents of a program content specified by an index at a keyword level.
- 10. (Previously Presented) The accumulation display device according to claim 1, wherein the trigger information includes one or more of a program ID for identifying a program corresponding to the trigger information, mode information for identifying the trigger information, starttime specifying an extracted scene, and extraction time, thereby specifying timing transmitting at least a part of the program content to the mobile data terminal.
- 11. (Previously Presented) The accumulation display device according to claim 1, wherein the trigger information includes a program ID for identifying a program corresponding to the trigger information, mode information for identifying the trigger information, and a specified index ID for identifying specified index information, thereby specifying timing transmitting at least a part of the program content to the mobile data terminal.
- 12. (Previously Presented) The accumulation display device according to claim 11, wherein the trigger information further includes meaning information describing a program content associated with index information at a keyword level,

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and grading index information of weight of the meaning information according to a degree of importance of the program content.

- (Previously Presented) The accumulation display device according to 13. claim 1, wherein the accumulated image processing unit adds, to the restructured program content, superimpose information displayed as an image separate from the program content, and changes and restructures time of each partial program content at restructuring the partial program content based on meaning information included in the trigger information and the index information.
- The accumulation display device according to claim 13, 14. (Original) wherein the superimpose information is generated using any of meaning information of trigger information, a trigger name, and meaning information of index information.
- The accumulation display device according to claim 12, 15. (Original) wherein the trigger information includes accumulation instruction information instructing accumulation of the corresponding program content.

16.-17. (Cancelled).

An interlocked display method using an 18. (Currently Amended) accumulation display device reproducing a currently broadcasted program content and a mobile data terminal interlocking with the accumulation display device to perform special reproduction of the program content,

the accumulation display device comprising the steps of:

receiving the currently broadcasted program content, index information associating a currently broadcasted program content with an index and specifying a scene of the program and trigger information including mode information for special reproduction of the program content and constituting metadata with the index information;

accumulating the program content, the index information and the trigger information;

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displaying the received program content;

extracting at least a part of the accumulated program content associated with the index information based on mode information from the trigger information, restructuring the program content extracted based on the mode information, and outputting the restructured program content to the mobile data terminal,

managing information of the mobile data terminal, generating a metadata for a video operation menu including various operation commands for performing reproduction, replay reproduction, stop and so on corresponding to the mobile data terminal, and transmits it to the mobile data terminal,

receiving an operation command according to the metadata for the video operation menu from the mobile data terminal, and outputting the restructured program content to the mobile data terminal or stopping the output operation according to the operation command,

wherein, in the step of outputting the restructured program content to the mobile data terminal, extracting at least a part of the program content from the index information based on contents of the trigger information, restructuring the program content extracted based on the mode information, and outputting the restructured program content to the mobile data terminal,

the data terminal comprising the steps of:

displaying the metadata for the video operation menu received from the accumulation display device on a sub display unit of the data terminal,

transmitting an operation command for performing video operation of reproduction, replay reproduction, stop and so on at the data terminal according to the metadata for the video operation menu to the accumulation display device,

receiving the program content restructured from the accumulation display device; and

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displaying the received and restructured program content <u>on the sub display</u> <u>unit of the data terminal</u> in a manner that the currently broadcasted original program content received by the accumulation display is displayed in parallel on a main display unit of the accumulation display device.

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